

Demand Response Measurement and Evaluation Committee Process Evaluation Plan PY 2012-2014

**Submitted in Compliance with D.12-04-045
Decision Adopting Demand Response
Activities and Budgets for 2012 through 2014**

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Forward

This process evaluation plan is provided in compliance with Ordering Paragraph (OP) 70 of the California Public Utilities (CPUC) Demand Response (DR) Decision 12-04-045, date April 30, 2012. The Decision directed the Demand Response Measurement and Evaluation Committee (DRMEC), to submit a detailed process evaluation plan that lists all Demand Response programs to be evaluated during 2012-2014, along with an explanation of the necessity of each evaluation.

The DRMEC is composed of members from the CPUC, the California Energy Commission, and a representative from each of the three Investor Owned Utilities (IOUs). Previous CPUC decisions created the DRMEC and authorized it to oversee the evaluation of statewide demand response activities; this authority was confirmed in CPUC decisions D.06-11-049, D.08-05-027, and D.12-04-045.

Background:

In CPUC Decision D.12-04-045 approving the IOUs funding requests for DR EM&V budgets, the CPUC authorized the DRMEC to continue to perform evaluations of both statewide and individual DR activities, and to continue reporting its findings in annual public workshops. The IOUs are required to file load impact estimates of the programs annually, and the CPUC directed the IOUs to conduct statewide impact evaluations whenever possible.

In their EM&V budget applications, the IOUs also requested funding to conduct process evaluations, but the CPUC found that “it is difficult to determine which DR programs require a process evaluation”. Subsequently, in D.12-04-045, the CPUC “directs the DRMEC to submit a detailed process evaluation plan that lists all DR programs to be evaluated during 2012-2014 along with an explanation of the necessity of each evaluation.”

DRMEC Oversight Process:

Through its consensus approach of the planning, execution, tracking, and review of DR evaluations, the DRMEC team (IOUs, CEC, and CPUC) provides oversight of all statewide and non-statewide demand response program evaluations. Through the annual planning process during which the DRMEC meets to discuss specific evaluation activities and assignments, all statewide and non-statewide evaluation projects are discussed and reviewed by the DRMEC as a team.

Due to the crosscutting workload for all three IOUs and the regulatory commitments for ex ante and ex post reporting timelines, sub-teams are assigned to specific projects, made up of subject matter experts from each of the DRMEC charter organizations. All projects are tracked via a shared secure virtual folder and the DRMEC conducts bi-weekly conference calls to assess progress, resolve issues, and ascertain needs and requirements for work scope review and completion.

While the DRMEC oversees all DR evaluations, statewide coordination is assigned annually to a lead IOU member, who is responsible for organizing the DRMEC activities and leading the regulatory filings for statewide reports. Within the DRMEC, a study lead IOU then is responsible for managing individual projects, procuring resources for specific studies, either statewide or non-statewide, and all IOUs share in a pro-rata cost of a statewide study project.

For non-statewide evaluations, the oversight processes are the same as for statewide evaluations in terms of the oversight role of the activities of the studies. All DRMEC members have access to the research plans, scopes of work, and interim reports, and can participate in the procurement review as well as assessment of draft reports.

Overview of DRMEC Process Evaluation Guidance:

The DRMEC is guided in its performance of the annual DR load impact studies by the DR Load Impact Protocols, approved in April 2008 in D.08-04-050. However, these protocols do not provide procedural guidance for process evaluations for demand response programs. In D.12-04-045, the CPUC gave preliminary guidance to the DRMEC on the 2012-0214 process evaluation plan to be submitted for staff review:

“This decision authorizes the DRMEC to continue to perform evaluations of both statewide and individual DR activities, and to continue reporting its findings in annual public workshops. We direct the DRMEC to ensure that EM&V activities are jointly planned and implemented to achieve the core objectives as adopted in D.09-09-047: 1) Load Impact Evaluations; 2) Process Evaluations; 3) DR Potential, Market Assessment and Technology Studies; 4) Policy and Planning Support; and 5) Financial and Management Audits”.

“the Commission directs the DRMEC to submit a detailed process evaluation plan that lists all DR programs to be evaluated during 2012-2014 along with an explanation of the necessity of each evaluation.”

“The process evaluation plan should provide details that were omitted in the DR applications, including timing and funding.”

“The plan should also include a list of what DR programs will not be evaluated and an explanation of why these programs will not be evaluated. This will ensure that process evaluations are performed when necessary, but that no program is inappropriately overlooked.”

“When appropriate, the DRMEC should consider statewide process evaluations. Because statewide evaluations are not always feasible, the plan should provide a process for maintaining oversight of non-statewide evaluations.”

Ordering Paragraph 70.

“The Demand Response Measurement and Evaluation Committee (DRMEC) shall submit a detailed process evaluation plan, as described in this decision, that lists all Demand Response programs to be evaluated during 2012-2014 along with an explanation of the necessity of each evaluation. The DRMEC shall submit the process evaluation plan no later than 45 days following the issuance of this decision.”

While this guidance in D.12-04-045 is specific for the DR program evaluation to be conducted by the DRMEC in 2012-2014, other evaluation frameworks and protocols from the energy efficiency proceedings can provide supplemental guidance.

Process Evaluation Protocols:

The California Evaluation Framework, dated June 2004 cites:

“process evaluation is an important tool in the evaluation toolbox. The process evaluation consists of in-depth examinations of the design, delivery, and operations of energy programs in order to improve the ability of the program to achieve energy savings and accomplish other program goals”.

The Framework defines a process evaluation as:

a systematic assessment of an energy efficiency program for the purposes of (1) documenting program operations at the time of the examination, and (2) identifying and recommending improvements that can be made to the program to increase the program’s efficiency or effectiveness for acquiring energy resources while maintaining high levels of participant satisfaction.

The California Energy Efficiency Evaluation Protocols, adopted April, 2006, currently provide the guidance for the EM&V of the IOU energy efficiency programs. The Process Evaluation Protocol chapter states the following:

“The primary purpose of the process evaluation is an in-depth investigation and assessment of one or more program-related characteristics in order to provide specific and highly detailed recommendations for program changes. Typically, recommendations are designed to affect one or more areas of the program’s operational practices. Process evaluations are a significant undertaking designed to produce improved and more cost-effective programs.”

DRMEC Recommendations for 2012-2014 DR Process Evaluations:

Overview

The primary objective of the DR process evaluations is to assess the effectiveness of the program operations and to identify program changes that would result in better customer experiences, more efficient delivery, and improved cost-effectiveness. Recommendations may include changes that can be made to the current programs as well as recommendations for fundamental design changes to be incorporated in the next program cycle. Typically, the studies will provide initial findings as available in the form of a memorandum and more developed findings and recommendations within a formal report.

The primary audience for the evaluation results is utility program staff, as they will incorporate the results and recommendations from the evaluations into their programs. CPUC staff also relies on evaluations to inform their policy and programmatic work. All final reports will be available as public documents on CALMAC.org, so all interested parties can learn from the studies.

The usual process for initiating and executing these studies is to solicit competitive proposals from interested evaluators via a Request for Proposals (RFP) process. The RFP for the study will include a description of the work scope based on the input of the DRMEC members, especially for the statewide evaluations; however, the more detailed work scope including detailed task descriptions and deliverable dates is developed as a final research plan by the Consultant once they are hired. The research plan and the draft report for each study are reviewed and approved by the DRMEC before finalizing.

Schedule and Milestones

Due to the late issuance of a Commission Decision authorizing demand response activities for 2012 through 2014¹, several new DR programs will not begin, and program changes that will benefit from process evaluations will not take effect until 2013. Corresponding process evaluations can't begin until that time. Interim partial outcomes may be available during program implementation in 2013, but final results are not expected until after the summer of that year.

This schedule of delivery for the upcoming process evaluations may not be optimal timing to inform the guidance for the next demand response program cycle²; however, the results of the 2012 ex post and ex ante impact evaluations will be available in early 2013 and interim report progress memos from the process evaluations will be available to the DRMEC for review in early 2014.

Key 2012-2014 DRMEC Milestones:

- Fall 2012 - DRMEC public workshop on research studies and process evaluations conducted during the 2009-2011 program cycle
- April 1, 2013 – Ex post and ex ante load impact annual studies for 2012 program year due
- September 1, 2013 – Commission Staff to provide guidance for 2015-2017 DR Program and Budget Applications
- Spring 2013 – DRMEC public workshops on baseline changes and ex post and ex ante reports filed for program year 2012
- Fall 2013 – DRMEC public workshop on research studies and process evaluations for the 2012 - 2014 program cycle
- January 31, 2014 – 2015-2017 DR Program and Budget applications due
- April 1, 2014 - Ex post and ex ante load impact annual studies for 2013 program year due
- Spring 2014 – DRMEC public workshops on baseline changes and ex post and ex ante reports filed for program year 2013
- Fall 2014 – DRMEC public workshop on research studies and process evaluations for the 2012 - 2014 program cycle

Proposed DR Process Evaluations

It is with the aforementioned fundamental guidance for process evaluations and through the consensus of the DRMEC that the following plan for the process evaluation of DR programs during 2012-2014 is submitted.

¹ Decision Adopting Demand Response Activities and Budgets for 2012 Through 2014, D. 12-04-045 was issued April 30, 2012

² Guidance for the 2015-2017 demand response application is expected September 1, 2013.

The Division of Ratepayer Advocates commented on this plan on Dec. 31, 2012. The DRMEC appreciates DRA's comments. The DRMEC will consider the comments in scoping the studies below, as discussed in the DRMEC responses to DRA comments (see attached matrix of comments and responses.)

Table 1: Statewide Programs for which DRMEC Recommends Process Evaluations

Statewide Program Name	Statewide Program Description and Justification for Study	Estimated Start-Stop Schedule	Est. Cost Range (in 000s)
Critical Peak Pricing (CPP)	<p>Critical Peak Pricing is a rate in which the utility charges a higher price for consumption of electricity on a few critical peak days (usually a few hours a day, around 12 days in a year) in exchange for a reduction in non-peak energy charges, demand charges or both. At all three IOUs, CPP is the default rate for large customers. The PY 2010 Statewide CPP load impact evaluation contained a recommendation for research on how to improve CPP customers' price responsiveness and on isolating the incremental impacts associated with AutoDR, Technology Incentives (TI) and Technology Assistance (TA). After discussing the pros and cons of studying both issues, the DRMEC chose to pursue investigating price responsiveness and deferred research on enabling technologies until more information on the first issue was gathered. The DRMEC began its study of improving price responsiveness in early 2012 and expects the project to be completed by the close of 2012. The process evaluation proposed here would build upon the findings collected through the 2012 research to investigate the program process improvements associated with enabling technology and study other developing topics relevant to CPP. Participating utilities for this process study will be PG&E (Peak Day Pricing), SDG&E, (Critical Peak Pricing) and SCE (Summer Advantage Incentive).</p> <p><u>Evaluation Objectives:</u> Objectives for the CPP evaluation include assessment of the default implementation process, customer awareness and messaging, and customer responsiveness associated with the load impacts for each of the events. The research will also look at customer retention and opt-out processes. See Notes at end of table.</p> <p><u>Status:</u> The first stage of the CPP Price Responsiveness research will be completed in 2012 and, pending the program implementation changes occurring with the enabling technology programs, the process-related CPP research could potentially begin in Q3 of 2013.</p> <p><u>Program Changes:</u> No major changes expected.</p>	2013 Q3 - 2013 Q4	\$250 to \$300
Permanent Load Shifting	<p>The Permanent Load Shifting (PLS) program is an IOU incentive program within the demand response programs portfolios designed to encourage customers to install enabling technologies that can shift on-peak energy usage to the off-peak periods on a continuous basis. Per D.12-04-045 Ordering Paragraph 62, the IOUs are directed to work collaboratively to develop and propose a standardized, statewide PLS program as described in the decision for the program years of 2012-2014. This approach is likely to result in material changes to each of the IOUs program designs from the original pilot programs during 2009-2011. The DRMEC recommends conducting a statewide process evaluation</p>	2013 Q2 - 2014 Q1	\$175 to \$250

	<p>of the PLS program to understand the efficacy of these newly redesigned programs. While it is clear that a process evaluation will be both appropriate and necessary, a more detailed research plan for this evaluation cannot be developed until the program design is finalized, which is expected in 2013. The ultimate timeline for this process evaluation will be dependent upon the timing of deployment of the Thermal Energy Storage systems. It likely will not make sense to begin the process evaluation before a sufficient number of installations have occurred in each IOU service territory.</p> <p><u>Evaluation Objectives:</u> Objectives may include evaluating the efficacy of the newly redesigned programs with respect to customer experience with the technology and the installation process, along with other factors that are to be determined. See Notes.</p> <p><u>Status:</u> The IOUs have filed their PLS program plan via advice letter on July 30, 2012 and are awaiting feedback. Final approval is expected for Q4 2012.</p> <p><u>Program Changes:</u> The PLS program is being redesigned for this program cycle.</p>		
Technology Incentive and Auto DR	<p>The Technical Assistance and Technology Incentives (TA&TI) Program provides eligible customers technical assistance in the form of demand response site assessments at no charge, and financial incentives for the installation of technologies that reduce electricity usage during periods of high demand. These services are also intended to give you increased flexibility to participate in other demand response programs that provide additional energy-saving incentives. During 2012, the IOU programs are expected to be coordinated and provide incentives to eligible customers on a \$/kW basis, with payments made on an ex ante basis based on technology tests. In 2013, the payment process is expected to be modified to a two-part remittance and the DRMEC plans to assess the efficacy of this approach during 2013.</p> <p><u>Evaluation Objectives:</u> Objectives may include evaluating the efficacy of the newly redesigned programs with respect to customer experience, along with other factors that are to be determined. See Notes.</p> <p><u>Status:</u> the study is on hold until the actual program changes occur in 2013</p> <p><u>Program Changes:</u> the IOUs are scheduled to submit changes to the TI and AutoDR programs via Advice Letter in late 2012 and the program is expected to be approved in 2013.</p>	2013 Q4 - 2014 Q3	\$175 to \$225
Statewide ME&O	<p>California's IOUs are currently developing statewide ME&O program plans for 2013-2014 that will replace Engage360 and Flex Alert, which is scheduled to end in 2012. The program will provide integrated DSM awareness and education for residential and small commercial customers and will address demand response, energy efficiency, distributed generation, and low-income programs. The ME&O program will coordinate its activities with the existing statewide Energy Upgrade California brand and will also continue the state's current emphasis on prompting electricity customers to immediately take action to save energy.</p> <p>During 2013, the new program will be designed and the DRMEC</p>	2013 Q4 - 2014 Q3	\$150 to \$200

	<p>will develop a research plan at that time based on preliminary feedback from the sub-team.</p> <p><u>Evaluation Objectives:</u> Objectives may include evaluating the efficacy of the demand response portion of the newly redesigned program with respect to customer experience, market penetration, and other factors that are to be determined. See Notes.</p> <p><u>Status:</u> The study is on hold until the program is approved in late 2012 or early 2013.</p> <p><u>Program, Changes:</u> The statewide ME&O applications are pending approval by the CPUC in A.12.08-xxx, filed August 2, 2012. The DRMEC study will look at process evaluation research questions specific to the demand response components of the program.</p>		
Demand Bidding Program	<p>PG&E and SCE's Demand Bidding Programs (DBP) are year-round, flexible, Internet-based bidding programs that offer business customers credits for voluntarily reducing power when a DBP event is called. DBP is for bundled service and Direct Access customers who have at least one service account with a demand of 200 kilowatts (kW) or greater in any 3 months during the preceding 12 months. There are no penalties for submitting a bid and not reducing power, however customers will not receive credit for an event during which power is not reduced.</p> <p>During 2012, in accordance with D.12-04-045, SCE will be re-designing the program via a Tier 2 advice filing to make it more cost effective and these program changes, if approved, will be implemented in late 2012.</p> <p>Per D.12-04-045, "PG&E shall perform an updated cost-effectiveness analysis and submit it along with a recalculated budget in a Tier 2 Advice Letter no more than 60 days from the issuance of this decision. If the results indicate less than cost-effective, PG&E shall further revise its Demand Bidding Program budget. We authorize PG&E a budget of \$3.216 million for its 2012-2014 Demand Bidding Program, contingent upon the receipt of the results of the resubmitted cost-effectiveness analysis."</p> <p><u>Evaluation Objectives:</u> Objectives may include evaluating the efficacy of the existing programs with respect to customer experience, market penetration, and other factors that are to be determined. See Notes.</p> <p><u>Status:</u> The study is on hold until the program changes for 2013 are approved and defined for evaluators.</p> <p><u>Program Changes:</u> SCE has filed advice letters in 2012 to change the DBP programs for improved cost effectiveness during 2013. The letter is pending approval. PG&E expects to file an advice letter soon. SDG&E has deployed a special emergency-triggered DBP program which is scheduled to end in December, 2012, and will not be included in this study. The future status of that program is uncertain.</p>	<p>2013 Q4 - 2014 Q3</p>	<p>\$175 to \$225</p>

AC Cycling (Summer Discount Plan, SmartAC™)	<p>The SCE SDP currently a reliability-based program that offers credit to customers who allow their air conditioning units to cycle off and on during curtailment events. The current SDP program is structured as an emergency- or reliability-based program. Curtailment event trigger criteria include CAISO declaration of a Stage 2 Emergency and SCE declaration of a Category 1, 2, or 3 Storm Alert that may jeopardize the integrity of SCE's distribution facilities.</p> <p>SCE has received approval to modify its existing residential Summer Discount Plan (SDP), from a reliability-based demand response (DR) program to a price-triggered program to comply with the terms of the Joint Settlement Agreement filed in the DR Rulemaking 07-01-041 (Settlement). These program changes are in the process of being implemented in 2012 along with the testing of the system for various pricing strategies.</p> <p>The PG&E SmartAC program allows customers to participate in demand response events via remote-control of their air conditioners and receive financial incentives. PG&E continues to refine and improve its SmartAC™ program. In 2011, PG&E deployed new cycling strategies that greatly improved the per device load response. The process evaluation will examine the customer experience with the program.</p> <p><u>Evaluation Objectives:</u> The general objectives will include assessing statewide customer experience from enrollment, control device installation, to comfort level during events. Program administration with respect to the interaction between the IOUs and the subcontractors will be reviewed. Provide documentation of program implementation strategies and procedures for the transition. Assess the effectiveness of program implementation and delivery strategies in eliciting customer response to events, customer retention and reasons for opting out, and overall customer satisfaction. As the final research plan is developed, other areas of research are likely to be added. See Notes</p> <p><u>Status:</u> The IOUs are in planning stages for 2013 summer operations. A report out of the 2012 SCE SDP transition process will be included in the DR application update at the end of year as per D.11-11-002, ordering paragraph 4³</p> <p><u>Program Changes:</u> No major changes are expected to these programs that would affect the process evaluation in 2013.</p>	2013 Q2 - 2014 Q2	\$250 to \$300
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Notes:

- A. Timing in the table is to indicate when during the 2012-2014 program cycle the study is most likely to be conducted (start and stop dates).
- B. Statewide studies should focus on the primary deliverables of recommendations to improve the design, delivery and operation of the program from the customer's perspective, best practices,

³ "The Southern California Edison Company shall update its Demand Response Application Cycle Funding Request for 2013-2014 in the fourth quarter of 2012 using information obtained from the operation of the revised Summer Discount Plan"

efficiency improvements, and enhancements to cost effectiveness. The primary audience will be IOU program managers and key market stakeholders and implementers.

- C. Process evaluations will also focus on issues such as customer satisfaction, awareness of the program, effectiveness of program ME&O, understanding the reasons for non-response and barriers to participation. We can also expand the concept to include investigation into how customers might respond to program variables/contemplated design elements.
- D. The statewide programs were chosen based on the statewide nature of the overall program rate design, communication treatments, and coordination. However, each utility may have a different specific rate design, incentive level, or administrative process that is specific to that utility
- E. The general evaluation objectives are identified in the above notes and in the overall guidance for process evaluation. However specific focus of the research will be customized and developed by the DRMEC sub-committee made up of key representatives from each IOU, CEC and CPUC. These sub-committees have yet to be established, pending approval of this plan.

Table 2: Statewide Programs for which DRMEC Does Not Recommend Process Evaluations

Statewide Program Name	Statewide Program Description and Reason for No Effort
Aggregator Programs (AMP, DRRC, CBP)	<p>Statewide aggregator programs are demand response forward contract resources and month-to-month nominated resources administered by 3rd party aggregators. Those providers are responsible for virtually the entire internal program processes that are traditionally covered IOUs in their programs that are reviewed by process evaluations. The IOUs have little to no insight as to those proprietary processes, which would render a process evaluation of their activities difficult, if not impossible. Furthermore, the aggregators have a business profit incentive to ensure that their programs under contract to the utilities are operating as effectively as possible through their own internal process reviews which are comparable to IOU process evaluations.</p> <p>For the above reasons, the DRMEC does not recommend a process evaluation for any of these aggregator-based programs as it would be infeasible for implementing aggregator process improvements. See Notes.</p>
Base Interruptible Program (BIP)	<p>The Base Interruptible Program (BIP) is open to customers or aggregated groups willing to reduce their electrical demand under short notice from the IOU. The customers select a Firm Service Level (FSL) that reflects the amount of electricity the customer determines is necessary to meet their operational requirements during a BIP event. They must also choose a participation option, which is the amount of time (15 or 30 minutes) the customer requires in order to respond to a BIP event. The IOUs BIP programs have been in place for many years and can be characterized as in the mature legacy program category. The programs are well understood by customers, have been maintained at a stable capacity level in accordance with regulatory and budget limitations, and have not undergone significant changes in recent years.</p> <p>As such, the DRMEC does not recommend a process evaluation for BIP as the program is not scheduled for changes or modifications. See Notes.</p>
Summer Saver Program	<p>The SDG&E Summer Saver program is a long-established performance-based contracted mass market demand response program run by a third party under contract to SDG&E. No changes were made in the current program cycle and the current program is scheduled to end in 2016.</p> <p>As such, the DRMEC does not recommend a process evaluation for the Summer Saver as the program is not scheduled for changes or modifications. See Notes.</p>

Notes:

- A. The authorized EM&V funds available for the DRMEC during 2012 through 2014 to conduct both impact and process evaluations and studies are limited. The general guiding principle for identifying programs whose processes will not be evaluated are to improve the design, delivery and operation of the program from the customer's perspective, best practices, efficiency improvements, and enhancements to cost effectiveness. The DRMEC believes this guidance will allow for the "just and reasonable" expenditure of ratepayer funds and excluding programs is a prudent effort to maximize the efficacy of the demand response EM&V budgets.

Table 3: Local Programs for which DRMEC Recommends Process Evaluations

Local Program Name	Local Program Description and Justification	IOU	Timing	
Peak Time Rebate (PTR)	<p>Peak Time Rebate is a rate that allows customers to earn a rebate by reducing energy use from a baseline during a specified number of hours on critical peak days. Like Critical Peak Pricing, the number of critical peak days is usually capped for a calendar year and is linked to conditions such as system reliability concerns or very high supply prices. In 2012, SDG&E will default all residential customers onto Peak Time Rebate, which ran as a pilot for 3,000 customers in 2011. The program offers a bill credit to customers who drop load when a "reduce your use" day is announced with no penalty for non-performance. During this first year as a utility-wide program, it will be important to examine messaging and customer awareness/response in order to make improvements as needed.</p> <p><u>Evaluation Objectives:</u> Objectives for the PTR evaluation include assessment of the implementation process, customer awareness and messaging. See Notes.</p> <p><u>Status:</u> The program is currently active, and the 2012 process evaluation is in process.</p> <p><u>Program Changes:</u> The program is new in 2012. After evaluating the first year, SDG&E will propose changes to the program for 2013 and 2014.</p>	SDG&E	2012 Q3 - 2013 Q1 2013 Q2 - 2013 Q4	\$175 to \$225 \$100 to \$150
Save Power Day (PTR)	<p>SCE launched its Peak Time Rebate (Save Power Day) program in 2012. This program is a default rate option for residential customers with an installed and program ready Edison SmartConnect meter. Through the launch this year, this is the first time that SCE is able to fully assess the end-to-end process, from the metering technology to customer notification to the customer billing processes. SCE has been conducting internal process assessments since the program launched. These assessments are providing dynamic effective feedback related to the systems, business processes, and outreach engagement tactics. SCE has been making real-time corrections as a result of these assessments. In 2013, the marketing processes will change and come to scale when the SCE SmartConnect project ends and all meters are installed. SCE plans to implement a full scale evaluation of the mature program which will have new customer engagement outreach processes in late 2013.</p> <p><u>Evaluation Objectives:</u> Objectives for the PTR evaluation</p>	SCE	2013 Q3 - 2013 Q4	\$125 to \$150

	<p>include assessment of the implementation process, customer awareness and messaging/capture/feedback. See Notes.</p> <p><u>Status:</u> The program is currently in full scale test mode with metering installations in 2012, with formal program operations and marketing scheduled for 2013</p> <p><u>Program Changes:</u> No changes are expected.</p>			
Peakshift	<p>Peakshift at Home (PSH) for residential customers and Peakshift at Work (PSW) for small commercial customers are two new optional rates that SDG&E will offer in 2013 that are similar to CPP-D. Because they are new offerings, a process check the first year facilitated by a process evaluation will provide timely and valuable information for any needed improvements to the customer treatments, marketing, and outreach for the rates.</p> <p><u>Evaluation Objectives:</u> The objectives for the Peakshift process evaluation will be developed in conjunction with the program rollout in 2013 and will include assessment of the program's effectiveness as well as customer response. See Notes.</p> <p><u>Status:</u> The evaluation is on hold until the program begins in 2013.</p> <p><u>Program Changes:</u> The program is new in 2013.</p>	SDG&E	2013 Q3 - 2013 Q4	\$150 to \$200
Home Area Network (HAN) Pilot	<p>A Home Area Network (HAN) is a network contained within a user's home that is enabled by a radio chip within a customer's smart meter. The HAN allows people to connect devices, such as dishwashers, TVs, washer and dryers, to their smart meter to receive pricing and usage information so that they are better able to automate and manage the timing and quantity of their energy consumption. Pursuant to CPUC Decision (D.)11-07-056 issued on July 27, 2011, PG&E launched the initial phase of its HAN implementation plan on March 1, 2012. This phase of the project will allow up to 500 early adopters to participate in a PG&E-sponsored pilot involving the installation of a HAN-enabled In-Home Display (IHD). This process evaluation will involve conducting surveys and focus groups with a sample of the customers, device installers, and call center staff that participated in the first phase of the pilot.</p> <p>In order to comply with the timeline and requirements in D.11-07-056, PG&E began planning for HAN Pilot impact and process evaluations in late 2011 and early 2012. The budget required to conduct this initial research was drawn from funds allocated for such studies authorized in the PG&E's Advanced Metering Infrastructure Decision (D.06-07-027). This funding source sunset at the conclusion of 2011. PG&E anticipated the need to continue such research activities beyond 2011 and therefore included such activities in its DR M&E funding request. The CPUC approved PG&E's 2012-2014 Demand Response Portfolio Funding Cycle Application (D.12-04-045) in April of 2012. Evaluation funding has since come from the DR M&E budget within this decision – which includes the evaluation of SmartMeter™-enabled technologies such as HAN.</p>	PG&E	2012 Q1 - 2013 Q2	\$150 to \$200

	<p><u>Evaluation Objectives:</u> The goal of the evaluation is to gather insights related to user experience, installation troubleshooting and operational planning and management so that PG&E and the state's other IOUs are prepared for the broader rollout of HAN devices. See Notes.</p> <p><u>Status:</u> Research being conducted during Q1-Q4 of 2012 and results are expected in Q2 of 2013.</p> <p><u>Program Changes:</u> The research is progressing as expected, with installations completed at the end of the summer 2012 and the focus groups and surveys on schedule to take place in late 2012 and early 2013. The HAN Pilot is expected to be completed by summer 2013.</p>			
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Notes:

- A. The above listing is a tentative proposal subject to DRMEC consensus changes. Studies will be delivered so that the results are actionable and timely so that they may useful to modify the program, or improve our forecast of how customers will respond.
- B. Local statewide studies should focus on the primary deliverables of recommendations to improve the design, delivery and operation of the program from the customer's perspective, best practices, efficiency improvements, and enhancements to cost effectiveness, for the specific utility delivering the program.
- C. Process evaluations will also focus on issues such as customer satisfaction, awareness of the program, effectiveness of program ME&O, understanding the reasons for non-response and barriers to participation. We can also expand the concept to include investigation into how customers might respond to program variables/contemplated design elements.
- D. The local programs were chosen based on the local nature of the overall program rate design, communication treatments, and coordination, as each utility may have a different specific rate design, incentive level, or administrative process that is specific to that utility compared to other utilities that may have a similar program.

Table 4: Local Programs for which DRMEC Does Not Recommend Process Evaluations

Local Program Name	Local Program Description and Reason for No Effort	IOU
PeakChoice	<p>Per D.12-04-045, the PeakChoice program will be ended by 12/31/2012.</p> <p>The DRMEC does recommend using ratepayer funds to perform a process evaluation of a terminated program. See notes.</p>	PG&E
API	<p>This is a remote-controlled radio based load control program for large water pumps in the agricultural and water pumping customer sectors. The program is a legacy DR program that has maintained a steady capacity value and is currently under the CAISO DR MW settlement cap.</p> <p>For the above reasons, the DRMEC does not recommend a process evaluation this program. See Notes.</p>	SCE

Notes:

The authorized EM&V funds available for the DRMEC during 2012 through 2014 to conduct both impact and process evaluations and studies are limited. The general guiding principle for identifying programs whose processes will be evaluated are to improve the design, delivery and operation of the program from the customer's perspective, best practices, efficiency improvements, and enhancements to cost effectiveness. The DRMEC believes this guidance will allow for the "just and reasonable" expenditure of ratepayer funds and excluding programs is a prudent effort to maximize the efficacy of the demand response EM&V budgets.

DRMEC Budget Authorizations:

In D. 12-04-045, the three IOUs were authorized the following M&E funding for 2012-2014:

PG&E - \$14,520,981 and \$1,200,000 (research studies)

SDG&E - \$5,115,000 and \$600,000 (research studies)

SCE - \$6,404,147 and \$1,200,000 (research studies)

The "research studies" category has been identified in OP 72 as funding to allow the Executive Director of the CPUC to perform "studies that advance the goals of the Commission's Demand Response activities". These studies will not be performed by the DRMEC or IOUs. Given that for PG&E and SCE their original EM&V budget requests were adjusted to transfer funds into this category, those reductions may affect the overall budgets for process evaluations that the utilities will conduct, which are secondary to the Load Impact and baselines studies ordered in Ops 11, 12, 67, 68, and 69. For SCE specifically, its overall EM&V budget was singularly reduced by an additional 30% in addition to the transfer. This has limited SCE's participation in the process evaluations for its local programs.

The IOUs are currently assessing these recent transfers and reductions in 2012-2014 EM&V funding allocations with respect to resource allocations in order to comply with the orders from D. 12-04-045 regarding load impacts and baselines and also meet the requirements of the process evaluation plan which is still in progress. The DRMEC is the open and collaborative forum which will resolve specific program funding issues and budget allocations for the IOU studies and each study will be funded based on the sub-committees estimate of the resources needed to accomplish the work.

**Summary of Division of Ratepayer Advocates Comments on
DRMEC 2012-2014 Process Evaluation Plan**

DRA Comment (Dec. 31, 2012)	DRMEC Response (Feb. 5, 2013)
<p>The DRMEC should facilitate further stakeholder involvement in the development of research plans, the specific research questions and scope of work, for the individual DR programs to be evaluated.</p>	<p>DRMEC agrees that stakeholder input would enhance DR evaluation planning and implementation. DRMEC proposes a minimum of two touch points for each study: 1) stakeholder input on draft evaluation plans at the onset of studies; 2) stakeholder input on draft study reports before they are finalized and published. If there are key interim deliverables, the DRMEC will share those for comment as well. The Energy Division is in the process of updating its on-line databases to support transparency and public input for Energy Efficiency EM&V and will explore including DR in these tools. In lieu of that, the DRMEC will reach out to stakeholders using the participation list from the December, 2012 DRMEC workshop, or the DR service list. Stakeholders can respond to ED staff, or the DRMEC, if the on line systems are not yet functioning, as communicated at the time by the DRMEC when it solicits comments.</p>
<p>The DRMEC proposes to spend an unspecified amount of measurement and evaluation funds (authorized in D.12-04-045) on process evaluations of programs but neglects to evaluate the potential of their integration into the CAISO market.</p>	<p>Energy Division appreciates DRA's comments. ED staff has identified research questions and needs related to integration that ED staff thinks are especially relevant at this time. ED staff encourages the DRMEC to address these needs where possible in the scope of planned process evaluations (which are budgeted in total at less than \$3 million). However, Energy Division believes that most of these questions are more appropriately addressed by Demand Response research, which is not managed by DRMEC. While ED sees a need to learn more about changes needed to the wholesale aspect of programs, ED believes that study of the design, implementation, etc. of current retail programs is still needed. Regarding integration, Energy Division believes:</p> <p>There is insufficient information on many aspects necessary to ensure the market development for DR direct participation in the CAISO's energy market (i.e., wholesale DR) including: 1) CAISO's wholesale DR products and rules, 2) utilities' implementation costs including technical/engineering upgrades to systems, 3) customers' willingness and capability, and 4) market potential for DR providers, etc.</p> <p>Potential research areas include: What is the IOU success in managing aggregators, including locational dispatch (one of the CAISO requirements), and in which areas? Can aggregators dispatch during the day (one hour in advance, etc.) rather than a day ahead?</p>

	<p>How responsive are they?</p> <p>Further, SCE has currently undergone more efforts in enabling some of its DR programs to bid into the CAISO energy market. Evaluation of SCE's efforts could also provide some answers.</p> <p>Research findings on these issues could inform the Commission in setting further policies and requirements for future DR programs that are integrated in the CAISO energy market.</p> <p>Related study needs ED identified include the need to assess what barriers exist from CAISO, IOUs, markets, other sources, to the programs transitioning to aggregation.</p> <p>Questions related to backup generators (BUGs): How many customers rely on BUGs?</p> <p>Related process evaluation questions that should be considered for planned studies:</p> <ul style="list-style-type: none"> • How willing are customers and the IOUs to accept/promote DR enabling technologies such as auto DR? • What is the extent to which customers might be willing to accept shorter notification times, more frequent events of shorter duration, and extended program hours (including weekends, non-peak hours, additional months?) <p>(Note the latter two questions are intimately related. The customer who refuses to use enabling technologies will likely have a very difficult time accepting any of the changes suggested in question 2, whereas use of auto DR technology can often make those changes quite easy for a customer.)</p>
<p>At a minimum, the plan should include the evaluation of Southern California Edison (SCE) and Pacific Gas and Electric's (PG&E) new contracts for aggregator managed programs, which will be dispatched, for the first time, at local levels. SCE's contracts include dispatch at sub-LAP⁴ and some of PG&E's contracts</p>	<p>DRMEC believes that these issues are mainly technology-related and that process evaluations are unlikely to provide much insight into them. The DR research studies, and possibly the DR load impact studies, may be able to better address these issues.</p>

⁴ SCE Advice 2768-E-A

include dispatch by local capacity area (LCA). ⁵ This is a critical new feature that has yet to be assessed in any meaningful way.	
DRA recommends the proposed DRMEC plan include process evaluations for marketing programs targeted to transmission constrained areas, specifically SCE's Circuit Savers Program, ⁶ SDG&E's Locational DR Pilot, ⁷ and potentially PG&E's "Portfolio and Marketing Optimization" activities. ⁸	On a call with DRA, and IOUs, SDG&E explained there is nothing to evaluate at this time, because the Locational DR Pilot is pending further decision from the Commission. PG&E explained that the optimization activities were not something that could be evaluated because they were focused on improving internal utility functions, not on any particular DR program or activity. These explanations were satisfactory to ED, and BCO staff, and we do not recommend pursuing evaluations. SCE explained that they did not have any budget to evaluate circuit savers. BCO agrees with DRA that it would be valuable to have an evaluation of Circuit Savers in this program cycle, if there are existing funds to draw on in an evaluation budget.
Process evaluations of dynamic pricing programs included in the proposed DRMEC plan should place a priority on capturing customer awareness, satisfaction and responsiveness of the specific program.	The DRMEC will consider this input when scoping research plans for these programs. DRA can reiterate this and other research needs for individual studies when it comments on the draft study plans for them.

⁵ PG&E Advice 4164-E

⁶ D.12-04-045 p.83

⁷ D.12-04-045 p.180

⁸ D.12-04-045 p.82